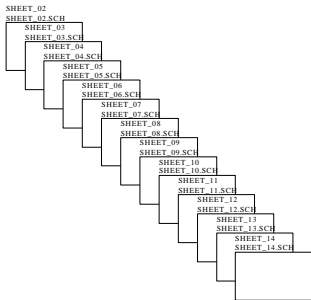


EV MINI BOARD

EVALUATION BOARD FOR ST PC CLIENT AND ST PC CONSUMER

REV 1.1

OCTOBER 31,1997



FILENAME	SHEET DESCRIPTION
SHEET_01.SCH	COVER
SHEET_02.SCH	SIP
SHEET_03.SCH	DRAM 0,1,2,3
SHEET_04.SCH	VGA, KEYBOARD, MOUSE
SHEET_05.SCH	NTSC/PAL ENCODER
SHEET_06.SCH	IRQ, DRQ, DACK MUX
SHEET_07.SCH	3 ISA + 3 PCI SLOTS
SHEET_08.SCH	ISA PULLUP/PULLDOWN
SHEET_09.SCH	SIO
SHEET_10.SCH	ROM BIOS
SHEET_11.SCH	SERIAL/PARALLEL
SHEET_12.SCH	FLOPPY/LOCAL BUS EIDE
SHEET_13.SCH	POWER SUPPLY, SPEAKER, BAT
SHEET_14.SCH	CONFIG STRAPS

THE INFORMATION CONTAINED IN THESE SCHEMATIC SHEETS IS
PRELIMINARY AND SUBJECT TO CHANGE WITHOUT NOTICE.
SGS-THOMSON BEARS NO RESPONSIBILITY FOR ANY ERRORS IN
THESE SCHEMATIC SHEETS.

AUTHORS : THIERRY SEGNEURIE

REVISION HISTORY:

REV 0.1 : INITIAL RELEASE MINI SCHEMATICS
REV 0.2 : EVMINI SCHEMATICS
REV 1.0 : FIRST RELEASE
REV 1.1 : Page 02 - MAINOSC moved from XTAL1 to XTAL0
Page 02 - Better decoupling
Page 03 - Better decoupling
page 05 - 22nF capacitors added on VCCA
page 09 - IC2CSDA pulled up to 3.3V instead of VCC
page 09 - IC2CSDA generated by 74LS125
page 09 - Testpins added on IC2 lines
page 09 - Testpins removed from Super I/O
page 10 - Jumper for 1MB EPROM Capability
page 11 - EMC improvement on Printer Port
page 11 - Unconnected IMC input pins fixed to VCC
page 13 - ST12 and ST13 pulled up to SRPVC instead of VCC
page 13 - J22 removed
page 13 - ATX corrected
page 14 - MDI[27:35] pulled up
page 14 - Jumper for PCI Clock selection

NOTES:

* : DEFAULT SETTING
* : STR3CMS : 0 OHM RESISTOR LOCATION FOR ST PC CLIENT

(*) : COMPONENT IS PUT FOR ST PC CLIENT ONLY
(X) : COMPONENT IS PUT FOR ST PC CONSUMER ONLY

STR3CMS FOOTPRINT IS 2 X 0805 WITH ONE PAD OVERLAPPED (THIS ALLOWS TO CONFIGURE USING 0 OHM RESISTORS)

PCB : ATX SIZE - 2 POWER PLANS - 2/4 SIGNAL LAYERS (2 IF POSSIBLE).

SGS-THOMSON MICROELECTRONICS
165 RUE EDOUARD BRANLY
91630 SAINT-GENIS-POUILLY FRANCE

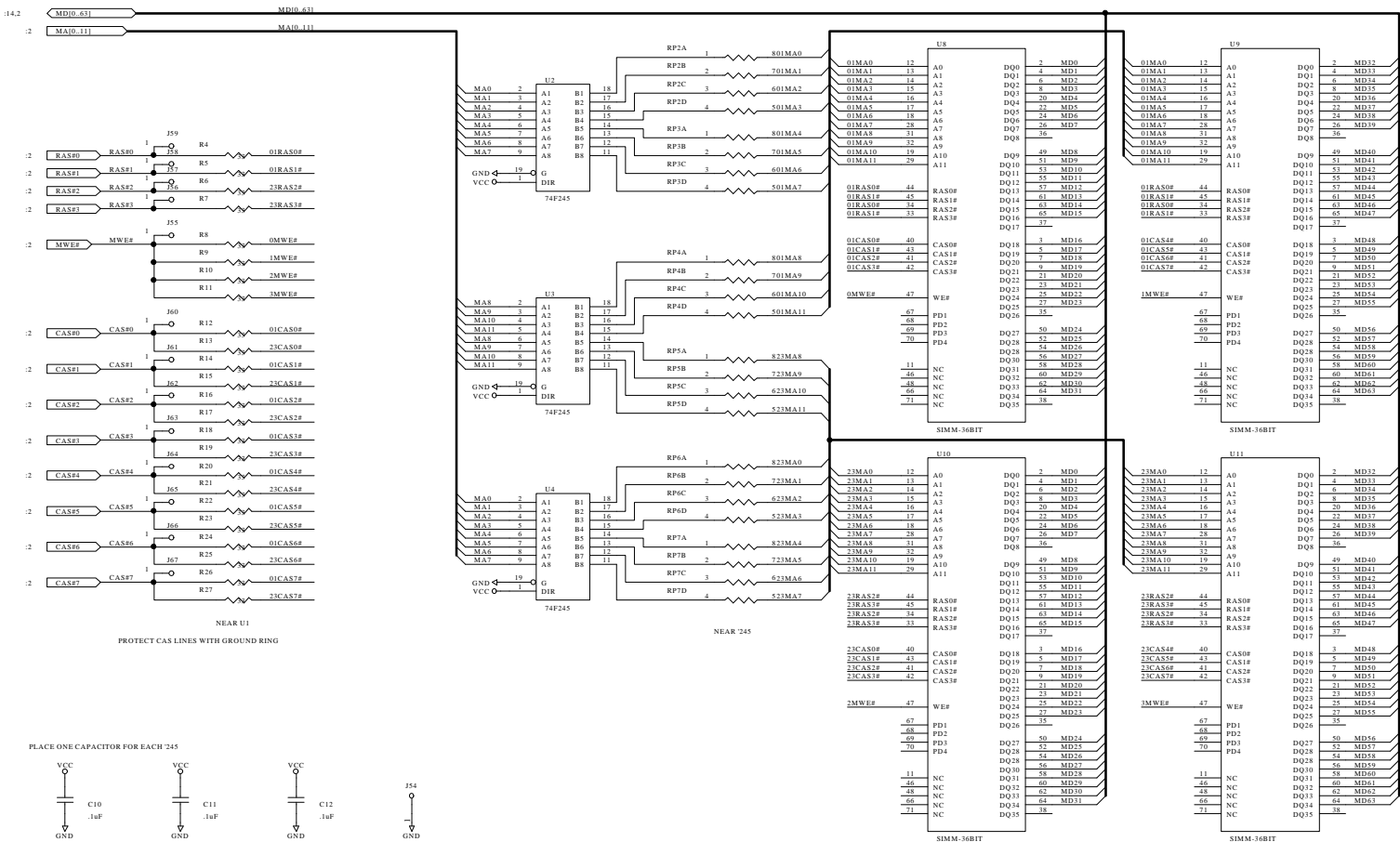
EVMINI : SIP100/STPC EVALUATION BOARD

SA00002AAXX

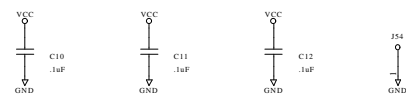
PROTEL CONFIGURATION : PORT GLOBAL ONLY

Title		
Size	Number	Revision
Orcad C		
Date:	2-Apr-1998	Sheet of
File:	C:\USR\JVS\MINI.PRI	Drawn By:

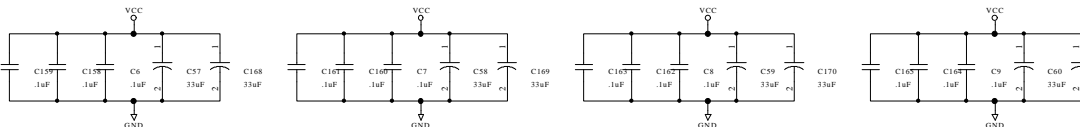
DRAM 0,1,2,3



PLACE ONE CAPACITOR FOR EACH 245

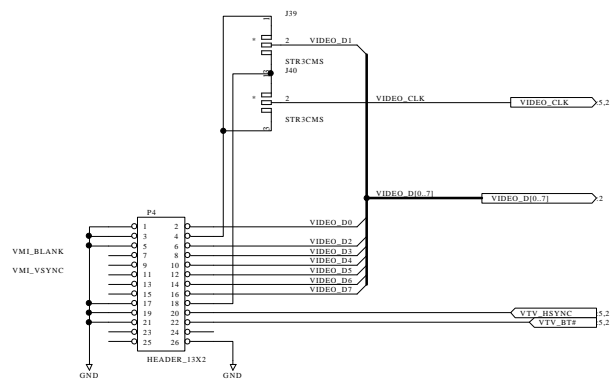
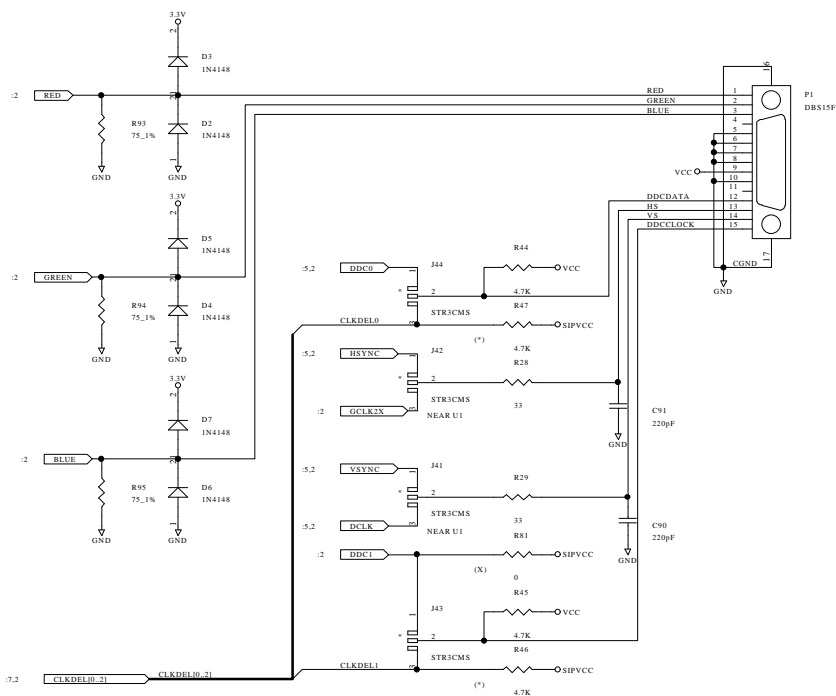


PLACE A SET OF CAPACITORS FOR EACH DRAM BANK : 100nF close to Power plus (10,30,59), 33uF on each side (left, right)

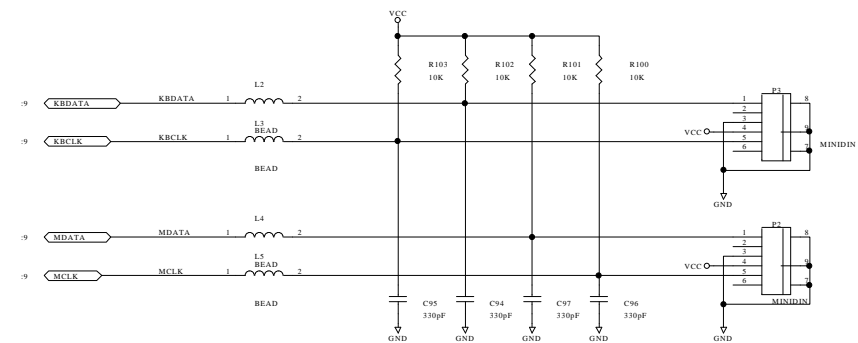


Title		
Size	Number	Revision
0x10	0x10	0x10
Date:	3-Nov-1997	Sheet of
File:	C:\EWS\386\386-03.SCH	Drawn By:

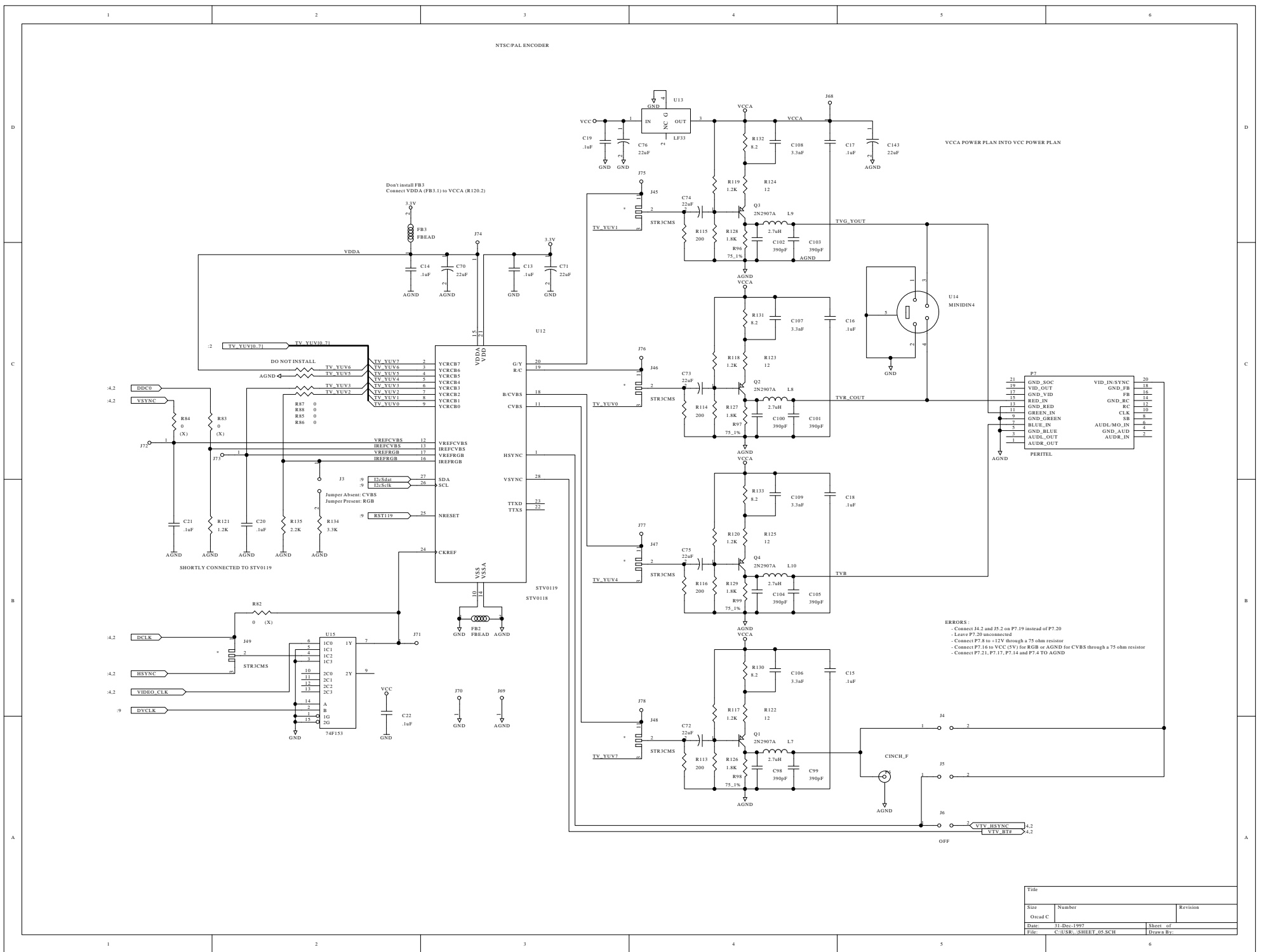
VGA, KEYBOARD, MOUSE CONNECTORS



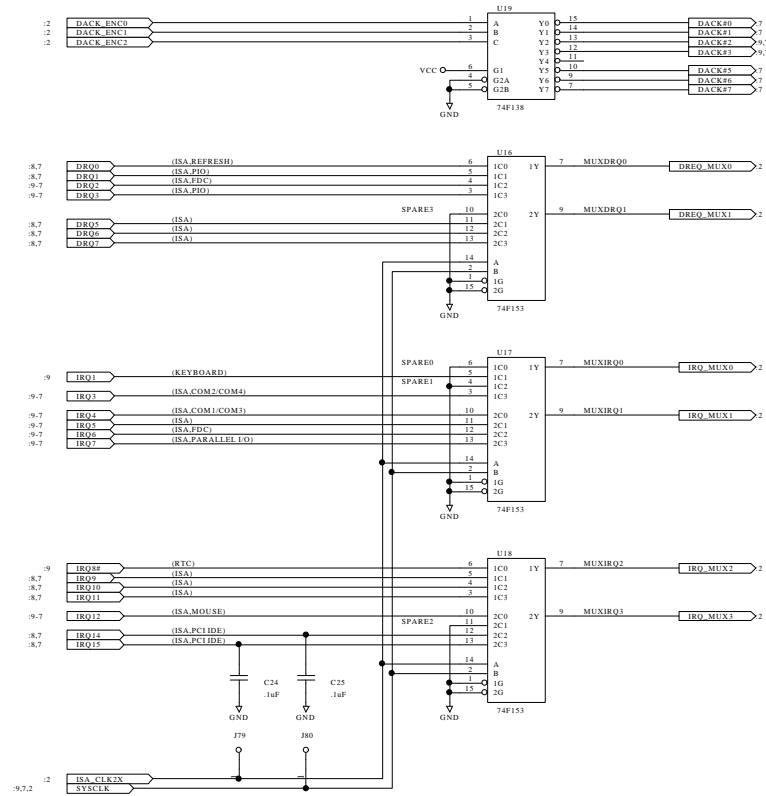
DCLK AND VIDEO_CLK PROTECTED WITH GROUND RING



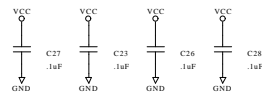
Title		
Size	Number	Revision
Over C		
Date:	31-Dec-1997	Sheet of
File:	C:\USB_SHEET_04.SCH	Drawn By:



IRQ, DRQ, DACK MUX

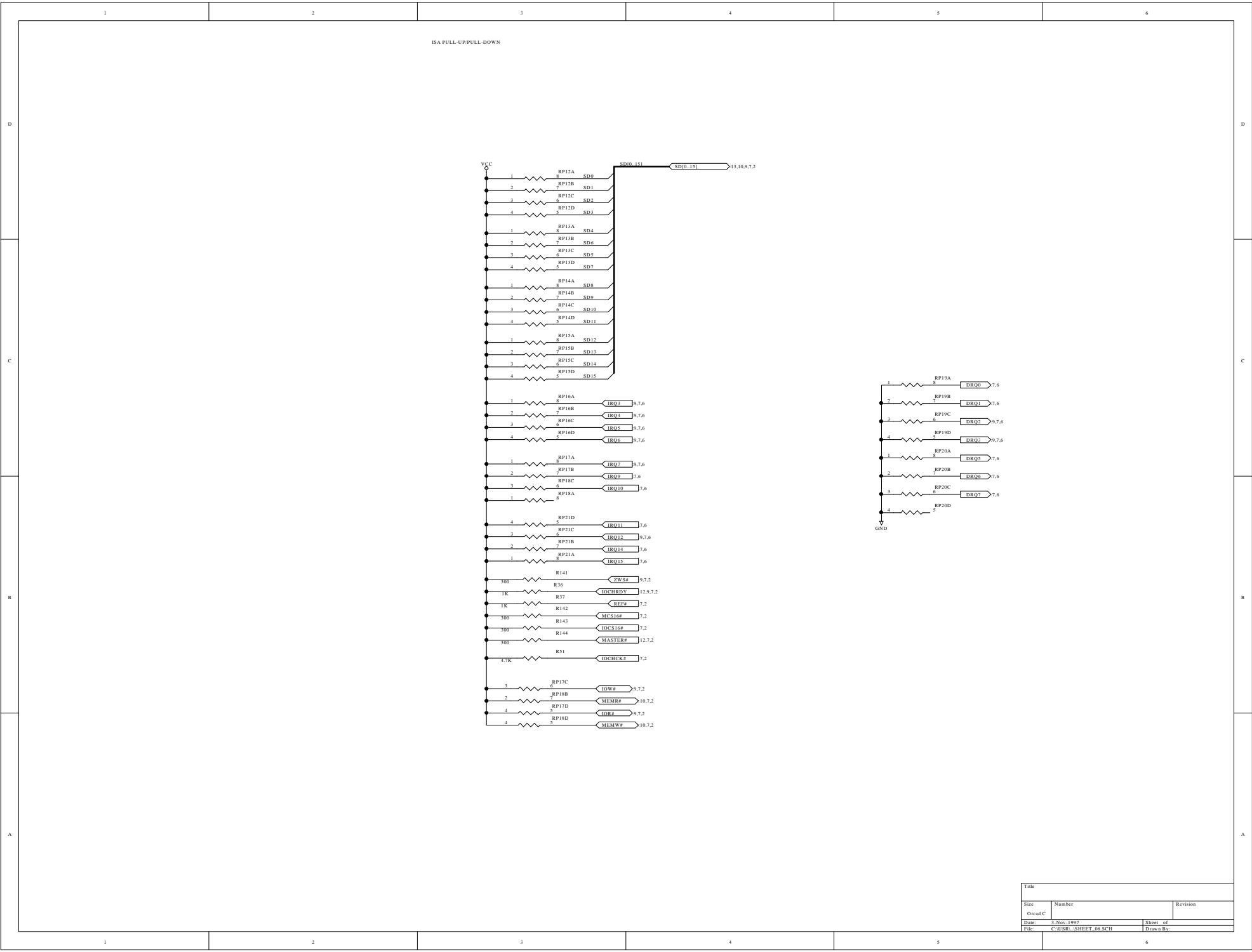


ONE CAPACITOR FOR EACH COMPONENT

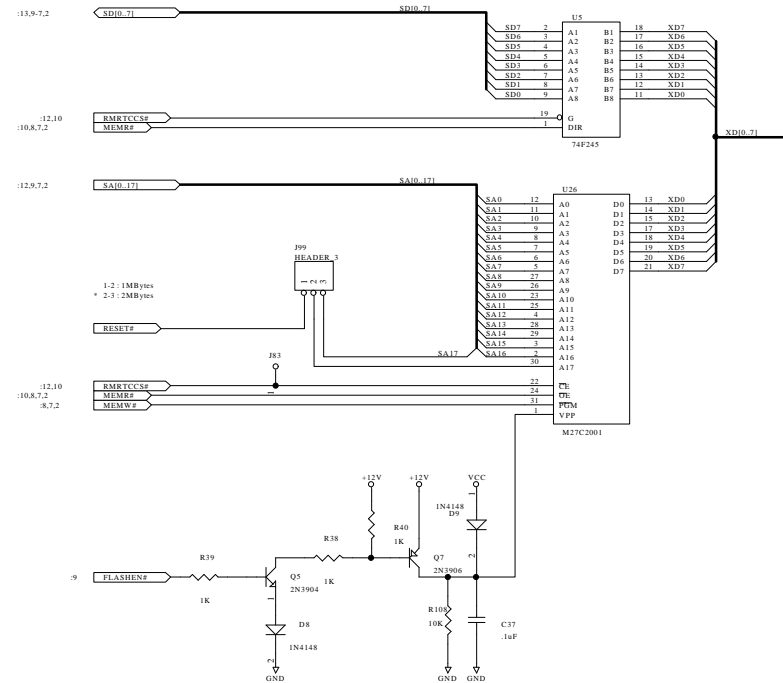


Title		
Size	Number	Revision
Drawn C		
Date:	3-Nov-1997	Sheet of
File:	C:\USB - SHEET-06.SCH	Drawn By:

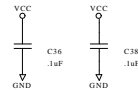
Title		
Size Orcad C.	Number	Revision
Date: 3-Nov-1997	Sheet of	
File: C:\USR\1\SHEET_07.SCH	Drawn By:	



ROM BIOS SOCKET . FLASH CIRCUIT

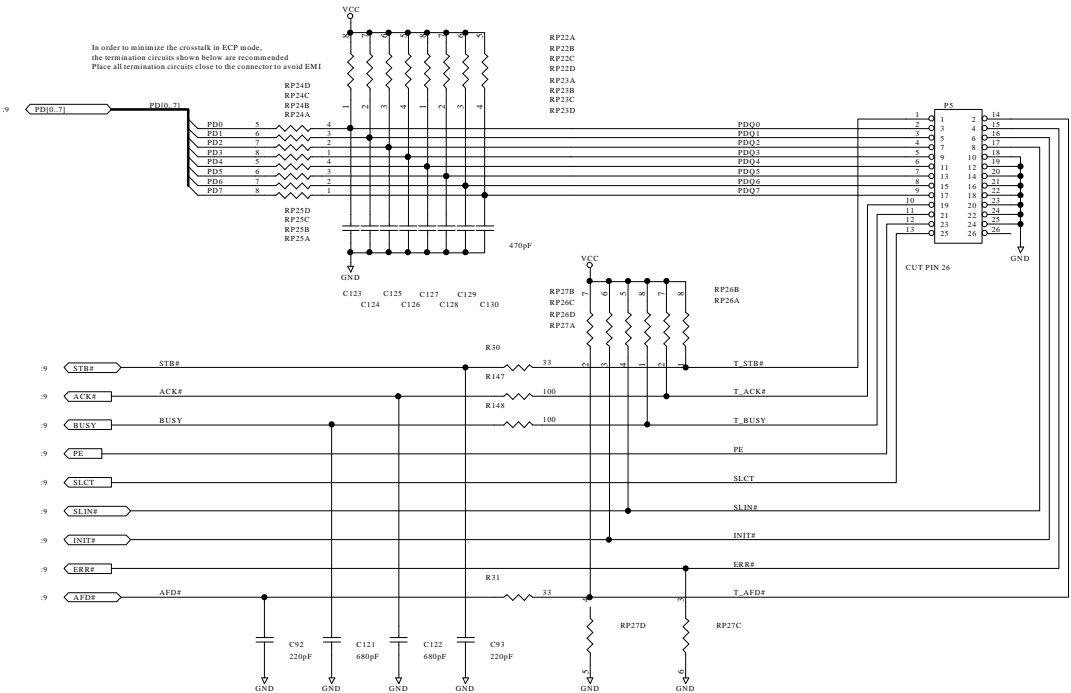
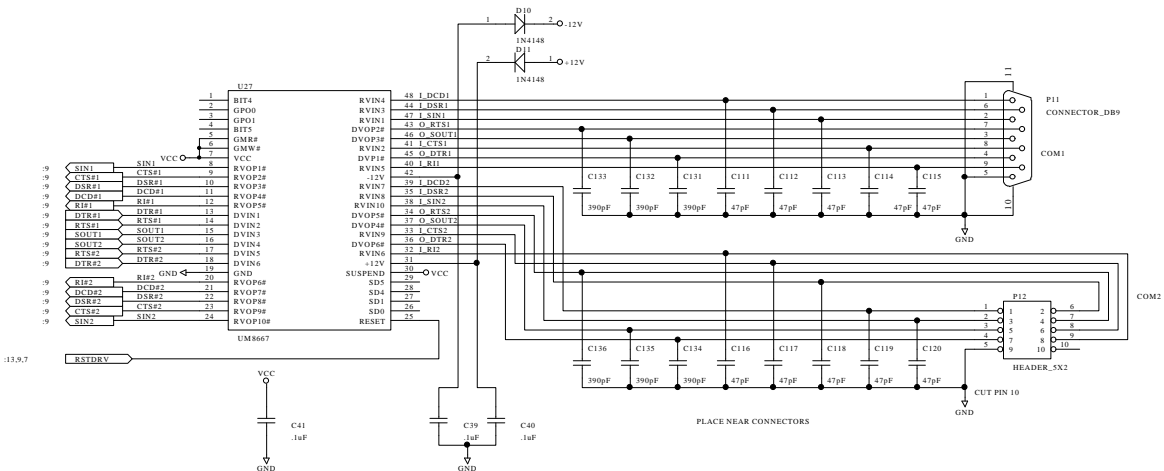


ONE CAPACITOR FOR EACH COMPONENT



Title		
Size	Number	Revision
Overd C		
Date:	3-Nov-1997	Sheet of
File:	C:\USB - SHEET - 10.SCH	Drawn By:

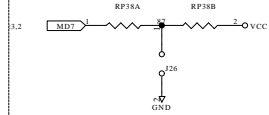
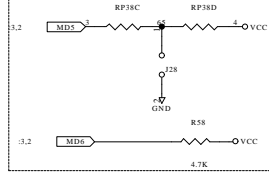
PARALLEL and SERIAL PORTS



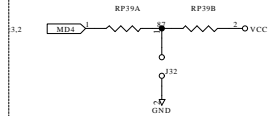
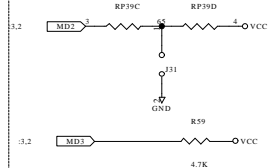
Title		
Size	Number	Revision
Oscad C		
Date:	31-Dec-1997	Sheet of
File:	C:\USB_SHEET_13.CH	Drawn By:



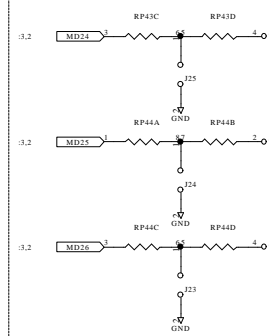
BANK0

MD7 Pull Down ==> EDO
MD7 Pull Up ==> FPMMD5 PD ==> 70ns
MD5 PU ==> 60ns

BANK1

MD4 Pull Down ==> EDO
MD4 Pull Up ==> FPMMD2 PD ==> 70ns
MD2 PU ==> 60ns

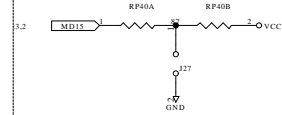
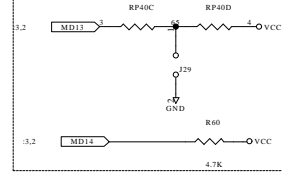
FREQUENCY



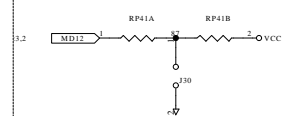
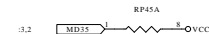
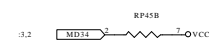
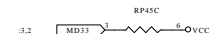
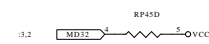
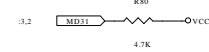
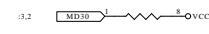
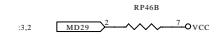
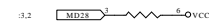
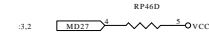
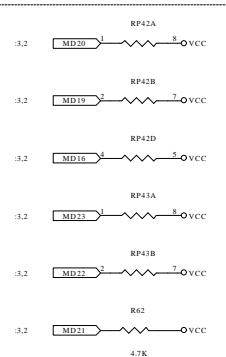
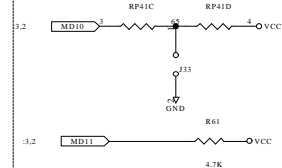
MD[24:26] HCLK PLL SETUP

PD PD PD : RESERVED
PD PD PD : RESERVED
PD PD PD : RESERVED
PD PU PU : 25 MHz
PU PD PD : 50 MHz
PU PD PU : 60 MHz
PU PU PD : 66 MHz *
PU PU PU : 75 MHzPU : Pulled Up (Jumper Unconnected)
PD : Pulled Down (Jumper Connected)

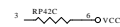
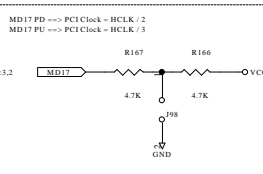
BANK2

MD15 Pull Down ==> EDO
MD15 Pull Up ==> FPMMD13 PD ==> 70ns
MD13 PU ==> 60ns

BANK3

MD12 Pull Down ==> EDO
MD12 Pull Up ==> FPMMD10 PD ==> 70ns
MD10 PU ==> 60ns

CONFIGURATION STRAPS



Title		
Size	Number	Revision
Over C		
Date	3-Nov-1997	Sheet of
File	C:\USB_SHEET_14.SCH	Drawn By: